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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

December 22, 2005

MEMORANDUM

SUBJECT: "Request for Waiver for Dislodgeable Foliar Residue Dissipation and Turf Transferable Residue Dissipation Studies with 1,2,4- Triazole Alanine and 1,2,4- Triazole Acetic Acid." [Barcode No.: 319566; TA PC Code: 600011; TAA PC Code: 600082]

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In a memorandum (C. Halder, February 26, 2004), the U.S. Triazole Task Force (USTTF) requested a waiver for dislodgeable foliar residue (DFR) and turf transferrable residue (TTR) studies with 1,2,4- triazole alanine (TA) and 1,2,4- triazole acetic acid (TAA). These studies had been listed in an OPP letter (D. Edwards, December 20, 2002) as requirements for completing an OPP risk assessment for 1,2,4- triazole and its conjugates. **HED** has reviewed the USTTF waiver request and **concludes that a waiver should be granted for DFR and TTR studies with TA and TAA.** This document presents the background for the HED waiver recommendation.

Basis for Request

The USTTF has requested a waiver of the DFR and TTR studies for TA and TAA on the following basis:

1) *“the scientific relevance of performing such studies on these metabolites in light of what is known about the metabolism of both triazole alanine and triazole acetic acid”*

Based on the results of metabolism studies, it appears that TA and TAA are primarily plant metabolites, and not products of animal metabolism. As such they are not expected to occur outside the plant (i.e., on plant surfaces) or to be metabolic breakdown products within the human body following dermal or incidental oral exposure to parent triazole-derivative fungicides.

2) *“the ability of such study designs to garnish meaningful information concerning these metabolites”*

Studies designed to detect DFR and TTR would not produce meaningful results regarding TA or TAA residues on plant surfaces. The long durations of time between application of parent triazole fungicides and the peak appearance of TA/TAA in plant tissues would preclude the conduct of any meaningful DFR/TTR studies on these metabolites using acceptable standard protocols. Further, as mentioned above, residues of TA/TAA are not expected to appear outside the plant tissue on foliar surfaces.

3) *“conservative risk assessment projections that show such studies are unnecessary to refine the associated risk cups”*

The USTTF performed a hypothetical postapplication exposure assessment for TA/TAA, using highly conservative exposure input parameters (e.g., that 100% of parent residue on plant surface is converted to TA/TAA). The estimated exposure still resulted in acceptable risks.

HED Recommendation

HED recommends granting a waiver for DFR and TTR studies with TA and TAA based on its agreement with the rationale put forth in 1) above. Metabolism studies and monitoring information lead to an expectation of negligible residues of TA or TAA on the surfaces of triazole-fungicide treated plant foliage. In addition, because these compounds do not appear to form through animal (and presumably, human) metabolism, it is believed that exposure to the parent triazole fungicide will not pose an exposure risk to TA or TAA as subsequent metabolic breakdown products.

cc: Michael Doherty, RAB2



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R119926

Chemical: 1H-1,2,4-Triazole-1-propanoic acid, .alpha.-amino-Triazolyl acetic acid (A metabolite)

PC Code:

60011

60082

HED File Code: 11000 Chemistry Reviews

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